CLAIMS

What is claimed is:

1. A method for establishing consistency, with respect to a data model, between sub-modules within an E-CAD tool, comprising the steps of:

creating a consistency database including at least one consistency indicator for each block of interest in the data model;

executing one of the sub-modules to perform an analysis of a current version of the data model;

comparing at least one data field value corresponding to said consistency indicator, for each block of interest, in source files in the current version of the data model being analyzed, against a corresponding said consistency indicator in the consistency database; and

issuing a warning indicating a possible discrepancy between data in the current version of the data model and corresponding said data in a previous said version of the data model, in response to detecting a difference between said at least one data field value in the current version of the data model being analyzed and the corresponding said consistency indicator.

2. The method of claim 1, wherein the consistency indicator comprises timestamp information indicating a time of creation of one of the source files.

3. The method of claim 2, wherein the consistency indicator further comprises additional information indicating file sizes of the source files in the data model.

4. The method of claim 1, wherein a plurality of the sub-modules are simultaneously operational.

5. A method for establishing consistency, with respect to a data model, between sub-modules within an E-CAD tool, comprising the steps of:

creating a consistency database including at least one consistency indicator for each block of interest in the data model;

executing one of the sub-modules to perform an analysis of a current version of the data model;

comparing a data field value corresponding to said consistency indicator, for each block of interest, in source files in the current version of the data model being analyzed, against a corresponding said consistency indicator in the consistency database;

wherein the consistency indicator comprises timestamp information indicating either a time of creation or a time of modification of one of the source files; and

issuing a warning indicating a possible discrepancy between data in the version of the data model being analyzed and corresponding said data in a previous said version of the data model, in response to detecting a difference between said data field value in the current version of the data model being analyzed and the corresponding said consistency indicator.

6. The method of claim 5, wherein the consistency indicator further comprises additional information indicating file sizes of the source files in the data model.

7. A system for establishing consistency, with respect to a data model, between sub-modules within an E-CAD tool, comprising:

a processor;

a consistency database, accessible by the processor, for storing consistency information for each block of interest in the data model;

a comparison module, capable of accessing the consistency database and executable via said processor, for comparing at least one

data field value, corresponding to said consistency information, against corresponding said consistency information in the consistency database;

and

an interface module, responsive to comparison of a difference between said data field value in a current version of the data model being analyzed and a corresponding said consistency information, for issuing a warning indicating a possible discrepancy between data in the current version of the data model and corresponding said data in a previous said version of the data model.

8. The system of claim 7, wherein the consistency information comprises timestamp information indicating a time of modification of one of the source files.

9. The system of claim 8, wherein the consistency information further comprises additional information indicating file sizes of the source files in the data model.

10. The system of claim 7, wherein the comparison module is functionally integrated into each of a plurality of the sub-modules.

11. The system of claim 10, wherein a plurality of the sub-modules are simultaneously operational.

12. The system of claim 7, wherein said comparison module is functionally independent of each of the sub-modules.

13. A system for establishing consistency, with respect to a data model, between sub-modules within an E-CAD tool, comprising:

means for creating a consistency database including at least one consistency indicator for each block of interest in the data model;

means for executing one of the sub-modules to perform an analysis of a current version of the data model;

means for comparing a data field value corresponding to said consistency indicator, for each block of interest, in source files in the current version of the data model being analyzed, against a corresponding said consistency indicator in the consistency database;

wherein the consistency indicator comprises timestamp information indicating at least one of a time of creation and a time of modification of one of the source files; and

means for issuing a warning indicating a possible discrepancy between data in the version of the data model being analyzed and corresponding said data in a previous said version of the data model, in response to detecting a difference between said data field value in the current version of the data model being analyzed and the corresponding said consistency indicator.

14. The system of claim 13, wherein the timestamp information indicates both a time of creation and a time of modification of one of the source files.

15. The system of claim 14, wherein the consistency indicator includes additional information indicating file sizes of the source files in the data model.

16. The system of claim 13, wherein the means for issuing a warning is functionally integrated into each of a plurality of the sub-modules.

17. The system of claim 16, wherein a plurality of the sub-modules are simultaneously operational.

18. A software product comprising instructions, stored on computer-readable media, wherein the instructions, when executed by a computer, perform steps for establishing consistency, with respect to a data model, between sub-modules within an E-CAD tool, comprising:

creating a consistency database including at least one consistency indicator for each block of interest in the data model;

executing one of the sub-modules to perform an analysis of a current version of the data model;

comparing a data field value corresponding to said consistency indicator, for each block of interest, in source files in the current version of the data model being analyzed, against a corresponding said consistency indicator in the consistency database;

wherein the consistency indicator comprises timestamp information indicating at least one of a time of creation and a time of modification of one of the source files; and

issuing a warning indicating a possible discrepancy between data in the version of the data model being analyzed and corresponding said data in a previous said version of the data model, in response to detecting a difference between said data field value in the current version of the data model being analyzed and the corresponding said consistency indicator.

19. The method of claim 18, wherein the timestamp information indicates both a time of creation and a time of modification of one of the source files.

20. The method of claim 19, wherein the consistency indicator further comprises additional information indicating file sizes of the source files in the data model.